GROUP COMPARISONS OF THE EFFECTS OF SOCIAL SUPPORT IN AMELIORATING UNEMPLOYMENT-RELATED STRESS AMONG DISLOCATED WORKERS

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Introduction

Unemployment is a persistent social problem in American history that affected over 6.2 percent of men and 7.3 percent of women sixteen years and older in August of 1986 (U.S. Bureau of Labor, 1986). Due to the growth in the number of persons in the United States Labor Force, the absolute number of jobless persons in the 1980's has outnumbered that of the Great Depression. The recurring escalations in the unemployment rate raises serious questions about the acceptability of such widespread joblessness and its social costs (Briar, 1983). The unemployed are not just a strain on societal resources, but represent an untold number of individuals who are unable to fulfill their role as provider for themselves and family (Bell, 1983).

Many individuals who experience unemployment are able to cope effectively with the economic and social changes that often accompany this altered status. However, there are increasing numbers of others for whom the stresses associated with unemployment are experienced as unmanageable. Their inability to manage their lives productively in the face of joblessness may create various physical and emotional services agencies. As the number of unemployed persons continues to increase in contemporary society (Briar, 1983), the health and well-being of these jobless individuals is of increasing interest and concern to community mental professionals, social workers, and social planners (Bell, 1983).

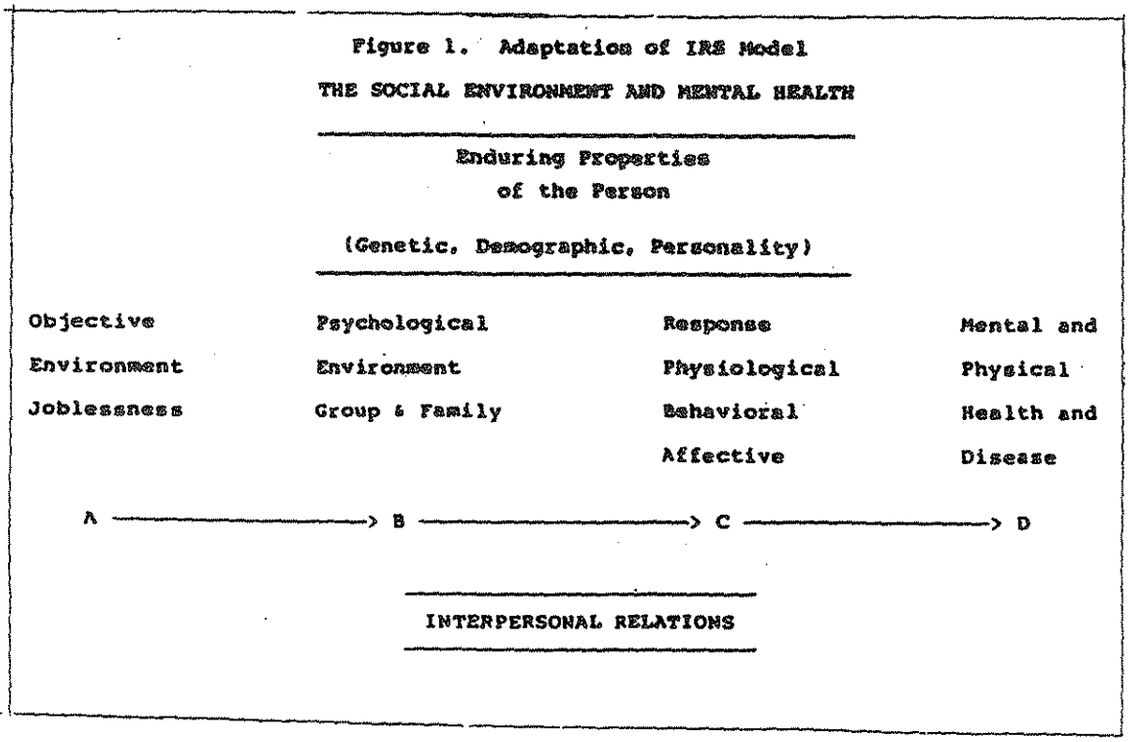
Program

A group intervention for workers faced with job loss was utilized in this study. The participants of the group intervention were unemployed volunteers. Such a program is based on the assumption that the problem of unemployment occurred due to the economic changes, not due to any particular social deficit of the individual.

With regard to program content, formal courses designed to improve job search skills have been found to be successful with a wide range of participants. Shapiro (Hayes & Nutman, 1981) reports a study on a program for Cambridge (Massachusetts) residents who have been unemployed for at least six months, had vocational abilities, were at the semi-skilled level or above, and had no obvious employment impediments. She found that 69 percent of the participants in this four-week program found work compared with 33 percent of the control group who did not receive the program. In his study of a job seminar for unemployed engineers and scientists, Powell (1973) found that lack of practice and discouragement were two problems preventing them from finding jobs.

Using the adaptation by Katz and Kahn's use of the Institute of Social Research Model (Hayes, et al., 1981), this investigator examined two aspects of unemployment: (a) the objective, and (b) the psychological environment of the unemployed (see Figure 1). The group programs were designed to structure group environments regarding educational and job search training assistance and provide material (instrumental aid) where it was needed. The informational needs of the unemployed were evaluated as he/she experienced the various stages of the unemployment cycle. This was done through programmed activities provided with the assistance of professional group leaders who were the co-ordinators of the program activities.

Figure 1. Adaptation of ISR Model



The idea of job search groups is increasing in areas fraught with high unemployment and may therefore provide a means for strengthening social supports through structured programmatic interventions that will serve as a means of helping displaced workers to find jobs, and may possibly then become a significant factor in alleviating unemployment related stress.

Research Method

Overall Design

This study is a survey of the effects of a group program intervention for self-selected unemployed persons, over time. Participants are workers who have experienced loss of job, specifically persons who are dislocated--who have lost their jobs as a result of the deteriorating economic conditions (i.e., plant closings, business relocations). Fifty of them participated in a structured job search program and fifty of them did not. The study design employs an adaptation of the quasi-experimental pre-test--post test comparison group design as proposed by Nachimas and Nachimas (1981, p. 107) and Campbell and Stanley (1963, p. 49). Campbell and Stanley (1963) observed that the comparison group design is well worth using in many instances where the orthodox control group designs are impossible, as is the case with the present study.

Recruitment of volunteers was conducted in Youngstown, Ohio, on the campus of Youngstown State University (YSU) during the testing and assessment phase of a job assistance program sponsored by the Youngstown Employment and Training Corporation (YETC), an agency that works with unemployed adults. Their group job assistance programs were offered in collaboration with YSU's Continuing Education Department. Applicants were given options as to whether they wanted to participate in the YETC Jobs Search Program or in a special retraining program of the Joint Entrepreneur Training Program (JETP). All individuals seeking assistance were given a choice of taking part in the research project. They were told that participation would have no effect on the services provided by YETC and that they had the right to withdraw from the research project, should they see fit to do so. Those who selected the JETP are hereafter referred to as the experimental group. Those who volunteered to attend group sessions with YETC hereafter are referred to as the comparison group. Of 300 individuals presented with a recruitment letter, 150 volunteered to participate in the research project. Of those, 30

applicants did not meet the program's eligibility requirements and were referred to a different program, also held on the campus of YSU, referred to as The Pre-Employment Academic Training (PAP) which is a basic education program. Of those who had entered the study programs, 20 participants reported to the researcher, when contacted for a follow-up interview, that they had left the program. Some of the reasons given by these persons included that they had obtained employment outside of the program area, or that they were going to college (or trade school) on a full-time basis.

	Program Participants	Signed Contracts	Remained in Program
Experimental (JETP)	100	80	50
Comparison (YETC)	200	70	50

This investigator chose specifically the use of a pre-test and post-test for both the experimental and the comparison groups. The design for this study is shown below:

	Time 1		Time 2
Experimental (JETP)	O_1	X_e	O_2
Comparison (YETC)	O_3	X_c	O_4

The major threat to validity of this design is selection. If volunteers differ in a characteristic related to the dependent variable, the difference between the experimental and comparison groups may be partly applied to this characteristic in addition to the program itself (Kerlinger, 1973, p. 342). Differences in motivation and in interest in programs may have predisposed applicants to favor one group over another.

Measures were gathered at the beginning of the study (Time 1) for subjects in both groups. The same measures were collected at Time 2 upon completion of the program. Time 2 interviews were scheduled no later than 2 weeks after each program was completed. The advantage of this Pre-test--Post-test design for this study is that all variables were measured before the occurrence of the phenomenon (O_1); after its occurrence the same variable was measured again (O_2). The difference in scores was examined to assess the impact of the phenomenon (X).

Subjects

The subjects in this study consisted of 100 unemployed persons. They were recruited by contacting the agencies described above. Criteria for inclusion in the sample was that individual participants were out of work and looking for work at the time of the study. The description of both programs and the voluntary nature of participation were explained above. There was no time limit set for length of time out of work. The time involvement of the study included the months of December 1985 through June 1986 when the programs ended. Subjects, on the average, were 36 years old, and had 13 years of formal educational training, and had been out of work an average of 21 months.

The two groups were quite similar in demographic characteristics. They did not differ significantly in age 35, or in months unemployed (20 months), based on 2 sample t-tests (see Table 1). In examining the equivalency of group composition relative to gender, race, job skill, marital status, education, loss, income adequacy, and religion, using the chi-square statistic, no significant relationship between group and demographic characteristic was found. No significant difference was found between the two groups regarding these demographic characteristics (see Table 2).

Measurements

Measurements completed by participants related to their perceptions of social support, both instrumental and determined by scores achieved on the Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey, & Carrieri, 1981) and socio-emotional, based on scores achieved on the Family Relationship Index (FRI) (Moos & Moos, 1981). The measure of the current quality of social relationships in the family was provided by the Family Relationship Index (FRI), that was derived from the three subscales, Cohesion, Expressiveness and Conflict, that comprise the relationship domain of the Family Environment Scale (FES; Moos & Moos, 1981).

Physical and mental health perceptions were derived from two measures: (1) the Health Opinion Survey Scale (HOS) (MacMillan, 1957) which, along with an item on perceived health measure, measures physical health; and (2) a mood scale developed by the Center for Epidemiologic Studies (CES), designated as the CES-Depression (CES-D) Scale (Radloff, 1977), which measures mental health.

Table 1.

Demographic Characteristics and Descriptive Statistics of Group 1 and Group 2 at Time 1.

Variable	Experimental (JETP) N=50 $\bar{x}$	S.D.	Comparison (YETC) N=50 $\bar{x}$	S.D.	Range	t-value[a]	df	p
Age	36.18	9.40	35.1	10.47	21-65 yrs	0.51	98	.60
Time Unemployed	19.98	17.31	21.2	16.63	1-60 mons	0.38	98	.70

Variable	Category	N	Percent	Category	N	Percent
Gender						
	Male	36	72	Male	34	68
	Female	14	28	Female	16	32
Total		50	100		50	100
Race						
	Am.Cauca.	36	72	Am.Cauca.	27	54
	Am.Black	14	28	Am.Black	17	34
	Hispanic	0	0	Hispanic	5	10
	Native Am.	0	0	Native Am.	1	2
Total		50	100		50	100
Jobskill						
	Skilled	36	72	Skilled	26	52
	Semi-skilled	13	26	Semi-skilled	17	34
	Laborer	1	2	Laborer	7	14
Total		50	100		50	100
Marital Status						
	Married	23	46	Married	25	50
	Single	19	38	Single	11	22
	Single now/ once married	1	2	Single now/ once married	3	6
	Divorced	7	14	Divorced	10	20
	Widowed	0	0	Widowed	1	2
Total		50	100		50	100

[a] A two-sample t-test comparing the means of the two groups

(Table 1 continued)

		Experimental (JETP) N	Percent		Comparison (YETC) N	Percent
Income Adequacy						
	Very Adequate for Needs	2	4	Very Adequate for Needs	1	2
	Moderately Meets Needs	9	18	Moderately Meets Needs	7	14
	Barely Meets Needs	20	40	Barely Meets Needs	24	48
	Inadequate/Does Not Meet Needs	19	38	Inadequate/Does Not Meet Needs	18	36
Total		50	100		50	100
Loss of Significant Person						
	Yes	21	42	Yes	22	44
	No	27	54	No	28	56
	None Reported	2	4	None Reported	0	0
Religion						
	Catholic	20	40	Catholic	18	36
	Protestant	22	44	Protestant	24	48
	Jewish	5	10	Jewish	3	6
	Not Reported	3	6	Not Reported	5	10
Educational Level						
	Less than High School Grad	5	10	Less than HS Grad	8	16
	High School Graduate	23	46	High School Grad	29	58
	Beyond High School	22	44	Beyond High School	13	26

Want for Assistance from Significant Person	Checked	Not Checked	Checked	Not Checked
1. Spouse/Partner	16	34	21	29
2. Family/Relatives	12	38	13	37
3. Friends	13	37	7	43
4. Work/School Associates	3	47	5	45
5. Neighbors	2	48	0	50
6. Healthcare Providers	1	49	1	49
7. Counselor/ Therapist	1	49	0	50
8. Minister/Priest/ Rabbi	1	49	0	50

Table 2

Chi-Square Tests for Independence of Demographic Characteristics and Group Membership

Trait	Chi-Square Statistic	d.f.	Level of Significance	Notes
Gender	0.1377	1	0.711	
Race	3.475	1	0.062	(a)
Marital Status	3.853	2	0.146	(b)
Job Skill	3.397	2	0.065	(c)
Income	1.276	3	0.735	
Loss	0.001	1	0.980	
Religion	1.192	3	0.755	
Education	3.699	2	0.157	(d)

(a) Race collapsed into two categories: white, non-whites.

(b) Marital Status collapsed into three categories: married, single, other.

(c) Job Skill collapsed into two categories: skilled/semi-skilled, and other.

(d) Education Status was collapsed into three categories: less than high school graduate, high school graduate, beyond high school.

Table 3

Difference Scores (Time 2 minus Time 1), and Standard Deviations for Perceived Social Support and Health Subscales and 2-Sample t-test Information for Comparison of Difference Scores Between the Experimental and Comparison Groups (N=50 in each Group)

	Experimental Group Difference Scores Time 2 minus Time 1		Comparison Group Difference Scores Time 2 minus Time 1			
	$\bar{x}$	S.D.	$\bar{x}$	S.D.	t-value	p
Aid	3.04	43.68	-1.76	18.82	.75	.453
Affect	.28	15.75	-1.26	5.29	.62	.536
Affirm	-6.56	15.54	-6.12	8.86	.62	.539
Short-aid	.44	8.00	.08	1.78	.31	.757
Long-aid	.76	7.25	.06	.91	.68	.500
Duration	.14	8.63	-.14	1.89	.22	.823
Frequency	.68	7.05	-.22	1.36	.89	.378
Missing	-.02	4.56	.08	1.28	-.15	.881
Amount	-.24	3.53	.08	1.87	-.57	.573
Mental	-.52	6.47	-1.38	4.32	.78	.436
Family	-1.02	4.93	.34	2.19	-1.78	.078
Illness	-1.32	4.57	.06	2.79	-1.82	.071
Significant Person	.14	1.80	-.08	.49	.84	.405
Resource	.18	.63	.10	.81	.55	.584
Assistance	0.00	1.13	-.02	.43	.12	.907

(df=98)

After analyzing for group score differences, the investigator sought to determine the degree of change in average scores at Time 2 compared to Time 1 by computing a change score for each person. This analysis was continued by using a two-sample t-test as a means of comparing the average change score for experimental group with the average change score for comparison group to see if the experimental group changed significantly over the comparison group. These findings are reported in Table 3.

Results

In considering the impact of the group programs as a factor in ameliorating unemployment-related stress, it is important to note that overall major statistically significant positive changes were not reported by persons who completed the experimental program in contrast to persons who completed the comparison group program. Since the study participants represented a cross section survey of the dislocated worker population known to the agencies involved in the study, it was assumed that the groups would tend to be similar in demographic characteristics. However, in order to empirically determine if the experimental program group and comparison groups were equivalent in terms of their demographic characteristics, a number of comparisons were made.

The paired t-tests reported in Table 4, was used to evaluate the changes from Time 1 to Time 2 for each group. The affirm score for the experimental group decreased significantly ($p<0.004$) as did the affirm score for the comparison group ($p<0.001$). The illness score for the experimental group decreased significantly ($p<0.046$) and the mental (mood) score for the comparison group decreased significantly ($p<0.028$) from Time 1 to Time 2. No other changes from Time 1 to Time 2 were significant. Changes are plotted in diagrams illustrated in Figure 2, Figure 3, and Figure 4.

Since each person, in effect, acts as his/her own control in a study of this type, Table 4 shows the comparison of the change scores (Time 2 minus Time 1) for each of the scales. This 2-sample t-test compares the amount of change in one group versus the amount of change in the other group. There were no significant differences in the change scores between the two groups. While not significant at the 0.05 level, there were, however, two change scores (family and illness) which differed between the two groups that approached the 0.05 level of significance but were not statistically significant. Based on 2-sample t statistics, none of these scores, with the exception of

Table 4

Mean Perceived Social Support and Health Subscales and Difference Scores, Standard Deviations and T-Values for Time 1 vs Time 2 for Experimental and Comparison Groups (N=60 for each Group)

	Experimental Group								Comparison Group							
	Time 1		Time 2		Difference Scores				Time 1		Time 2		Difference Scores			
Subscales	$\bar{x}$	S.D.	$\bar{x}$	S.D.	$\bar{x}$	S.D.	t-value[a]	p	$\bar{x}$	S.D.	$\bar{x}$	S.D.	$\bar{x}$	S.D.	t-value	p
Aid	142.32	64.84	145.36	66.04	3.04	43.68	0.49	0.625	137.66	79.26	138.78	70.45	-1.76	10.62	-1.15	.256
Affect	49.04	23.92	49.24	23.67	0.20	21.73	0.09	0.929	49.20	20.26	47.94	37.62	-1.26	8.29	-1.48	.099
Affirm	46.34	22.24	39.98	16.12	-6.36	19.84	-2.98	0.004	45.82	25.94	36.96	18.62	-8.12	8.84	-6.48	.001
Short Aid	25.32	13.01	25.76	12.02	.44	8.00	.38	.694	22.06	14.22	23.94	14.41	.68	1.78	.32	.752
Long Aid	21.68	10.44	22.36	9.90	.76	7.25	.76	.462	20.38	12.29	20.44	12.39	.06	.91	.46	.644
Duration	20.54	13.27	20.78	12.71	.16	8.63	.11	.909	27.54	15.48	27.48	10.73	-.14	1.84	-.33	.642
Frequency	33.36	18.77	34.26	18.51	.68	7.85	.68	.500	24.66	13.27	24.24	13.38	-.22	1.34	-1.14	.258
Missing	2.68	5.85	2.66	4.97	-.02	4.34	-.03	.978	2.48	4.00	2.48	4.03	.06	1.28	.44	.658
Amount	2.20	2.785	2.04	2.37	-.24	2.52	-.66	.633	2.30	3.69	2.38	3.01	.08	1.09	.30	.764
Family	15.30	3.62	14.28	5.89	-1.02	6.93	-1.46	.150	12.66	6.17	14.00	3.57	.34	2.19	1.18	.378
Illness	37.06	10.26	35.74	9.93	-1.32	6.87	-2.84	.006	36.68	9.17	35.84	8.98	.66	2.79	.35	.888
Mood (Depression)	13.34	10.84	12.84	11.08	-.92	6.92	-.57	.570	12,60	12.30	14.22	12.09	-1.30	4.32	-2.26	.028

df = 49

[a] A paired t-test comparing means at Time 1 versus Time 2.

family, differed significantly ($p<0.05$) between the two groups.

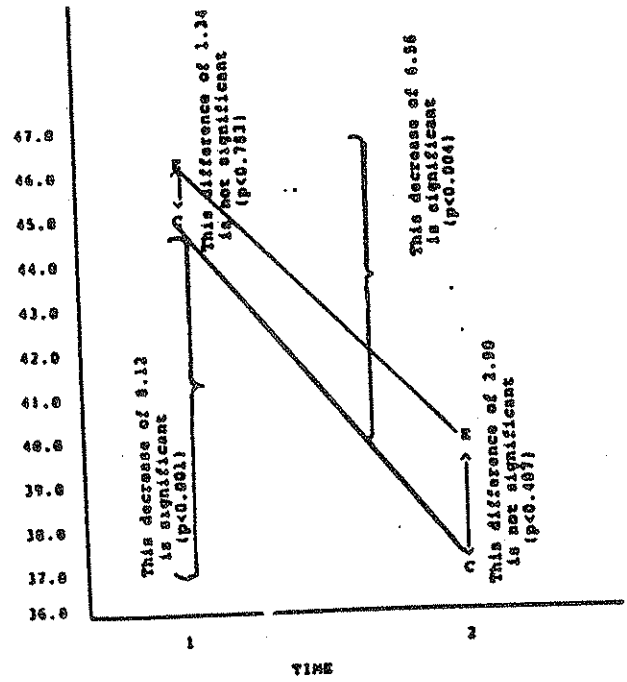


Figure 2 Plots of Subscale Means of Affirm Variable by Time for Experimental Group and Comparison Group.

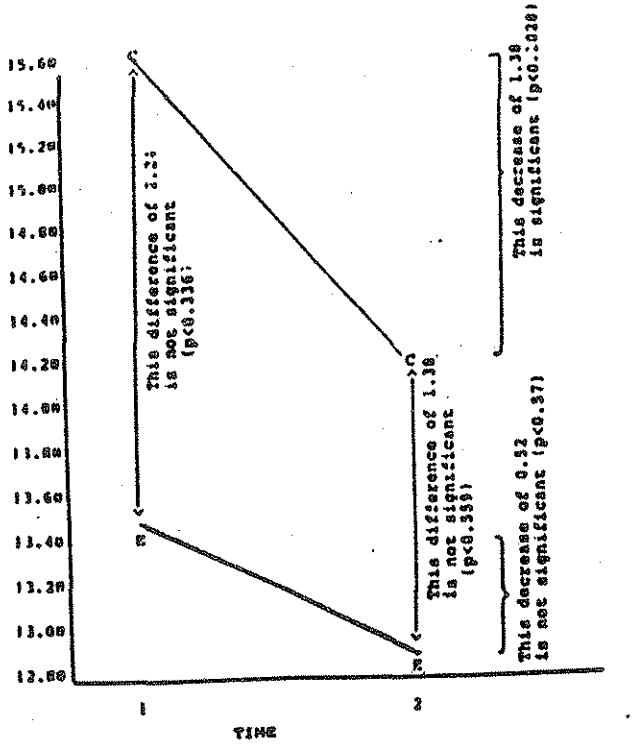


Figure 3 Plots of Subscale Means of Mental (Mood-Depression) Variable by Time for Experimental Group and Comparison Group.

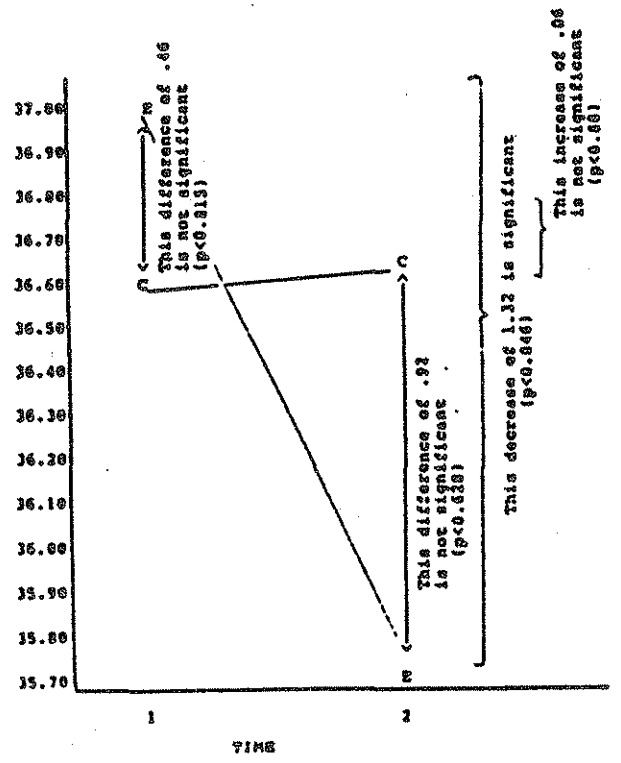


Figure 4 Plots of Subscale Means of Illness Variable by Time for Experimental Group and Comparison Group.

Summary and Discussion

The findings of this study did not support the major hypotheses. Although the subjects who participated in the formal job assistance program reported overall greater degrees of positive changes in level of perceived support and health at the end of the study, overall these changes were not significant. The decrease in illness symptoms reported was significant for the experimental group, while the comparison group experienced a slight increase, though not significant.

At the beginning of the study, the levels of perceived support were similar by both groups in Affect, Affirmation and Aid overall. By Time 2, however, the level of perceived social support of the experimental group participants was greater than that in the comparison group, though not significantly so. These findings suggest that the program intervention did increase levels of perceived support but not significantly overall as had been hypothesized.

The results suggest that formal program intervention served to produce to some degree positive changes in health perceptions of illness for members of the experimental group. As noted above, there was a significant decrease at Time 2 in symptoms of illness reported by the experimental group. A significant decrease was also noted in the mental health of the comparison groups and a decrease, though it was not significant, in the experimental group's depression scores. Other factors, such as the expense of conducting the Joint Entrepreneurship Training Program intervention as well as the more extensive and comprehensive reports of testing and job evaluation, should also be entered into the overall analysis. If this information had been included, more definite conclusions could have been drawn.

Implication for Social Workers

While there is no uniformity of research design or of results in the research examined in this field, a number of conclusions about effective work orientation training programs do appear to be warranted (Hayes et al., 1981). These conclusions are:

1. Job orientation - successful programs seem to be associated with the preparation for a specific job rather than work in general and are seen by trainees to lead to guranteed employment;

2. Training methods - some methods, such as role play and self-directed discussion groups, appear to be less successful than those which involve work experience, feedback on progress towards work related goals and immediate and positive reinforcement;

3. Liaison and support - a number of studies report that counseling and liaison between the training and work setting is frequently associated with success;

4. Identity and experience of training staff - some studies indicate that professional educators, especially those based in universities and colleges, appear to be less effective than resource persons who have, or are seen to have, a more intimate knowledge and understanding of the immediate work environment;

5. Course content - more success appears to be reported when attention is focused on work attitudes and work behavior rather than upon more general issues such as those associated with being disadvantaged and unemployed.

The JETP experimental program, as well as the YETC comparison program, embodied organizational changes in its group approach for jobless persons. The group approach in helping unemployed persons to find jobs and learn to deal more effectively with unemployment-related stress is a relatively new phenomena among public service agencies. Evidence established that social support can help the individual cope with stressful events (Cobb, 1976; Pinneau, 1975). The descriptions of the experimental and comparison programs defined the social resources, informational material, efforts to enhance feelings, individual self-confidence and self-worth through programmatic aids in self-assessment, and job finding (or job creation skills). In addition to the job assistance aspects of the program, the group approach can help to reduce the social isolation that is associated with the experience of job loss (Jahoda, 1982). For many persons, their work roles are very important social roles and are linked with membership of various work-related role sets. Unemployment disqualified the individual from membership in these role sets. Thus, not only is unemployment associated with loss of authority within the family and status in the community, but also with loss of many work-related contacts. Group programs, such as offered by the agencies in this study, provide an opportunity and means for restoration of work-related contacts, friendships, and the social resources that one finds within social networks (Hayes, et al., 1981).

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